Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp	
L1	0	(lift near off) and kim-paul.in.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:26	
L2	0	(liftoff) and kim-paul.in.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:26	
L3	7	(lift near off) and kim-paul.xa.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:29	
L4	1107	216/22,39,40.ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:29	
L5	5559	427/127,128.ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:29	
L6	4992	451/5,41.ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:29	
L7	973	360/324.11,324.12.ccls.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:30	
L8	0	(tunnel near MR) and bias\$3 and liftoff	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:30	
L9	56	(tunnel near junction) and bias\$3 and liftoff	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:33	
L10	10	7 and 9	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:32	
[11	436	HASEGAWA-NAOYA.in.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:32	

2/23/06 2:23:25 PM Page C:\Documents and Settings\pkim1\My Documents\EAST\Workspaces\10655942 - tunneling magnetoresistive element.wsp Page 1

L12	0	9 and 11	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:32
L13	2	11 and tunnel and bias\$3 and liftoff	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:33
L14	0	11 and tunnel\$3 and domine and liftoff	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:34
L15	44	11 and (tunnel\$3 near magnetoresistive)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:35
L16	4	15 and (domain near control)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:35
L17	82	(domain near control) and (tunnel\$3 near magnetoresistive)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:36
L18	11	(domain near control) same (tunnel\$3 near magnetoresistive)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:37
L19	10744	(bias\$3 near layer) sme (insulat\$3 near layer) same (tunnel\$3 near magnetoresistive)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:38
L20	14	(bias\$3 near layer) same (insulat\$3 near layer) same (tunnel\$3 near magnetoresistive)	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:38
L26	2	JP-11175920-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 13:53
L27	2	JP-08148334-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 11:57
L28	0	JP-0916914-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 12:01

L29	0	0 JP-40916914-\$.did.		OR	ON	2006/02/23 12:01
L30	0	JP-916914-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 12:01
L31	2	JP-09016914-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 12:01
L32	3	("5607599").PN.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/02/23 13:56
L33	0	32 and oblique\$2	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 13:57
L34	1	32 and sputter\$3	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 14:01
L35	6	tunnel same sputter\$3 same oblique\$2	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2006/02/23 14:02
S1	1094	29/603.07,603.08.,603.11-603.16, 603.18.ccls.	USPAT; JPO; DERWENT	OR	ON	2006/02/17 13:24
S2	4903	4903 360/121,122,126,317.ccls.		OR	ON	2005/11/21 12:59
S3	488	360/324.2,324.12.ccls.	USPAT; JPO; DERWENT	OR	ON	2006/02/23 10:30
S4	1394	magnetic near (tunnel adj junction)	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:00
S5	140	antiferromagnetic with ferromagnetic with pinned with free with (insulat\$3 or spacer)	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:01
S6	22	S4 and S5	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:01

S7	1	S1 and S6	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:01
S8	5	S3 and S6	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:01
S9	6	S7 or S8	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:07
S10	18	(hard near (bias adj layer)) near free	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:23
S11	3	S4 and S10	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:14
S13	11 ("20010021089" "20020154456" "6249407" "6327107" "6330136" "6381107" "6469879" "6542342" "6650513" "6661626" "6671141").PN.		US-PGPUB; USPAT; USOCR	OR	ON	2005/11/21 13:15
S14	3	("5650958" "5729410" "6084752").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/11/21 13:20
S15	2	("6836392").PN.	USPAT; USOCR; JPO; DERWENT	OR	OFF	2005/11/21 13:20
S16	4	(hard near (bias adj layer)) near (insulat\$3 adj layer)	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:24
S17	1	(hard near (bias adj layer)) near (contact\$3 or connect\$3) near free	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:36
S18	3	(hard near (bias adj layer)) near (antiferromagnetic)	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:36
S19	21	(bias adj layer) near (antiferromagnetic adj material)	USPAT; JPO; DERWENT	OR	ON	2005/11/21 13:36
S20	18	(hard near (bias adj layer)) near free	USPAT; JPO; DERWENT	OR	ON	2005/11/22 08:45
S21	308	magnetoresist\$3 near sensor	EPO; JPO	OR	ON	2005/11/22 08:46
S22	8	S21 and (bias\$3 and insulat\$3)	EPO; JPO	OR	ON	2005/11/22 08:46

	2	(0.6354.0301) DN	LIC DODLID	00	OFF	2006/02/17 12:24
S23	2	("6751073").PN.	US-PGPUB;	OR	OFF	2006/02/17 13:24
		•	I ICDAT.			
			USFA1,			
			USOCR:			
			300	İ	1	
1			JPO;	1		
			DERWENT	İ		
			DEKWENT			
::::::::::						
524		("5729410" "5898548"	US-PGPUB:	OR	I ON	2006/02/17 13:27
J- 1						
		"5901018" "5936293"	USPA1:			
		"COOF7FO" "COCCO+O"				
			USUCK	***************************************	l ::::::::::::::::::::::::::::::::::::	
					I ::::::::::::::::::::::::::::::::::::	
		6/06040 0102000				
		"6556391").PN.				

2/23/06 2:23:25 PM Page 5



Home | Login | Logout | Access Information | Alarts |

Welcome United States Patent and Trademark Office

		2		45 46 45 54 4 4 10	A1 10 0 0 0 0 0 1				
Search Res	iults			BROWSE	SEARCH	IEEE XPLORE G	UIDE		
Your search	"((((magnetoresistive eler n matched 2 of 1320520 do n of 100 results are displaye ofions	cuments.					⊘ e-mail		
View Sessi	on History	Modi	ty S	earch			,		
New Searc	h	((((ma	((((magnetoresistive element) <and> tunnel)<in>metadata)) <and> (pyr >= 1950 <and< td=""></and<></and></in></and>						
» Key IEEE JNL IEEE JNL IEEE CNF	IEEE Journal or Magazine IEE Journal or Magazine IEEE Conference Proceeding IEE Conference Proceeding	Displ	v se		Citation & Abs	' yoke-type read head	s based on a		
IEEE STD	IEEE Standard			Magnetics, IEEE Transa Volume 35, Issue 5, Pa Digital Object Identifier 1 AbstractPlus Reference Rights and Permissions	ctions on ort 1, Sept. 1999 P 0.1109/20.800898	age(s):2586 - 2588			
				Magneto-resistive IC m Scheuerlein, R.E.; Nonvolatile Memory Tec	• •	4-4-4			

22-24 June 1998 Page(s):47 - 50

Rights and Permissions

Digital Object Identifier 10.1109/NVMT.1998.723217

<u>AbstractPlus</u> | Full Text: <u>PDF</u>(412 KB) IEEE CNF

Help Contact Us Privacy &:

© Copyright 2006 IEEE -

Minspec*